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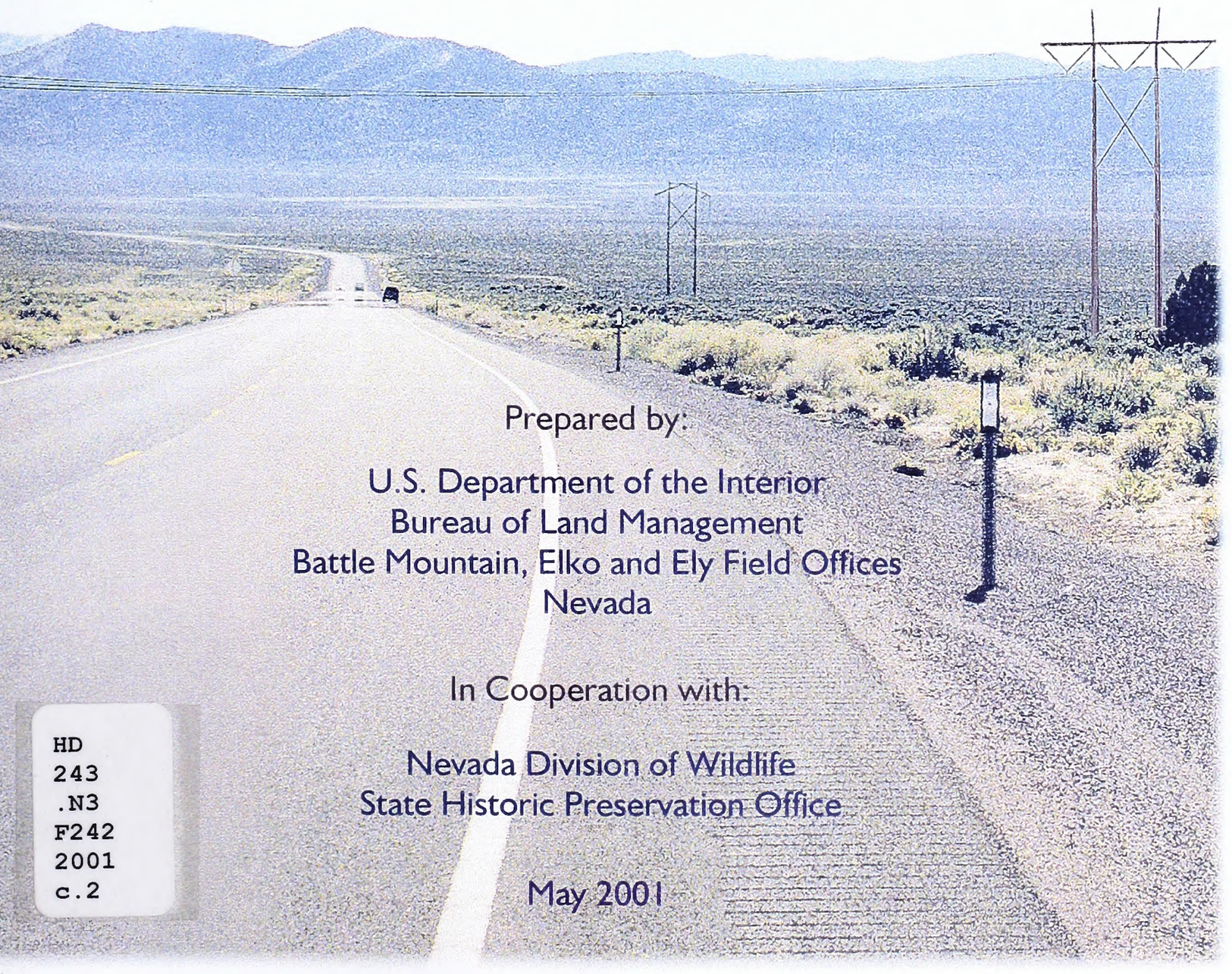
Falcon to Gonder 345kV Transmission Project

Executive Summary

DRAFT

Environmental Impact Statement and Resource Management Plan Amendments



Prepared by:

U.S. Department of the Interior
Bureau of Land Management
Battle Mountain, Elko and Ely Field Offices
Nevada

In Cooperation with:

Nevada Division of Wildlife
State Historic Preservation Office

May 2001

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EXECUTIVE SUMMARY

The entire Draft EIS/RMPA is available for review at www.nv.blm.gov/falcongonder. Or you may also request a full document by contacting:

Kenneth Bailey
Bureau of Land Management
Battle Mountain Field Office
50 Bastian Road
Battle Mountain, NV 89820
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United States Department of the Interior

Bureau of Land Management
Battle Mountain Field Office
50 Bastian Road
Battle Mountain, Nevada 89820
(775) 635-4000 Fax (775) 635-4034

In Reply, Refer to:
NV 063-EIS00-27
1790/1600
N-63162
2800

Dear Reader:

Enclosed for your review and information is the Draft Environmental Impact Statement (EIS) prepared by the Bureau of Land Management (BLM) for the proposed Falcon to Gonder 345 kV transmission project and related Resource Management Plan amendments.

The Draft EIS analyzes the direct, indirect, and cumulative impacts associated with the construction, operation, and maintenance of a 345 kV transmission line that would cross both public and private lands in north central Nevada. The project applicant, Sierra Pacific Power Company, has applied to the BLM for a right-of-way grant for the portion of the transmission line that would traverse federal public lands. This Draft EIS also analyzes related amendments to BLM's Shoshone-Eureka, Elko, and Egan Resource Management Plans.

Written comments on the Draft EIS are encouraged and must be postmarked by August 22, 2001. Please send written comments to: Mary Craggett, Bureau of Land Management, Battle Mountain Field Office, 50 Bastian Road, Battle Mountain, NV 89820.

A Final EIS will be issued upon the completion of the 90-day review period for this Draft EIS. If you have any questions, or would like any additional information, please contact Mary Craggett, BLM Team Leader, at (775) 635-4060, or Kenneth Bailey, Project Coordinator, at (775) 635-4092.

Sincerely,

M. Lee Whittet

for Gerald M. Smith
Field Manager
Battle Mountain Field Office

Enclosure:
Falcon-Gonder DEIS

DRAFT FALCON TO GONDER 345 kV TRANSMISSION PROJECT ENVIRONMENTAL IMPACT STATEMENT AND RESOURCE MANAGEMENT PLAN AMENDMENTS

Lead Agency:	U.S. Department of the Interior Bureau of Land Management (BLM) Battle Mountain, Elko and Ely Field Offices
Cooperating Agencies	Nevada Division of Wildlife State Historic Preservation Office
Project Location:	Eureka, Elko, Lander, and White Pine Counties, in the State of Nevada. The project would be constructed on both public and private lands.
EIS Number: Case File Number	NV 063-EIS00-27 N-63162
Correspondence on this EIS Should be Directed to:	Mary Craggett, Team Leader Bureau of Land Management, Battle Mountain Field Office 50 Bastian Road Battle Mountain, NV 89820-1420 (775) 635-4060
Questions Related to this EIS Should be Directed to:	Mary Craggett, Team Leader Bureau of Land Management, Battle Mountain Field Office 50 Bastian Road Battle Mountain, NV 89820-1420 (775) 635-4060
Website:	This document is also available on our website at http://www.nv.blm.gov/falcongonder

ABSTRACT

Sierra Pacific Power Company (SPPC) is proposing to construct a new 345 kV electric transmission line in north central Nevada that would extend approximately 165-185 miles between the Falcon substation west of Dunphy to the Gonder substation north of Ely. The transmission line would be supported by approximately 725 to 820 tubular steel H-frame structures and angle towers that would vary in height from 75 to 130 feet above ground level, depending on the terrain. The project also includes the expansion and installation of additional facilities at the existing Falcon and Gonder substations. SPPC has applied for a right-of-way grant from the BLM to construct, operate and maintain the project on federal public land. This Draft Environmental Impact Statement (EIS) analyzes the environmental effects of five potential transmission line route alternatives for the project, as well as the No Action Alternative. The Draft EIS also analyzes the environmental effects of amendments to BLM Resource Management Plans (RMPs) that may be required as part of the proposed action (i.e., amendments to the Shoshone-Eureka, Elko, and Egan RMPs). Written comments on the Draft EIS must be postmarked by August 22, 2001, and sent to the address above.

Responsible Official for the EIS: Robert V. Abbey
Nevada State Director
Bureau of Land Management

EXECUTIVE SUMMARY

This Environmental Impact Statement (EIS) has been prepared by the U.S. Bureau of Land Management (BLM) pursuant to the requirements of the National Environmental Policy Act of 1969, 42 U.S.C. §§ 4321 et seq. and its implementing regulations issued by the Council on Environmental Quality (40 CFR 1500-1508). The BLM is the lead agency for this EIS, with the Battle Mountain Field Office serving as the lead office. This document was prepared with the cooperation of the BLM's Elko and Ely Field Offices, as well as the Nevada Division of Wildlife and State Historic Preservation Office.

The purpose of this document is to analyze the environmental effects of a new power transmission line being proposed by Sierra Pacific Power Company in north central Nevada, and to evaluate related amendments to BLM Resource Management Plans.

PROPOSED ACTION

This EIS is intended to inform the public, agencies and decision-makers about potentially significant environmental effects of the "Proposed Action" and measures that can be taken to mitigate environmental effects. The Proposed Action would involve the BLM's approval of:

- Sierra Pacific Power Company's application to secure a right-of-way grant to construct, operate, maintain and terminate a 345 kV transmission line on federal public lands. The transmission line would connect two existing substations (the Falcon to the Gonder substations) and the project would also involve expansion and upgrades of the two substations. Sierra Pacific Power Company (SPPC) refers to this proposal as their "Falcon to Gonder project."
- BLM Resource Management Plan amendments would be required to designate a new utility corridor along the preferred route alternative, as portions of the transmission line would be outside of currently designated corridors. The amendments also would modify a previous decision in order to allow the transmission line to cross a low-visibility corridor along the Interstate 80 (I-80), and would delete an existing planning corridor along Nevada Highway 305. These amendments are summarized below and discussed in detail in Chapter 5.

PROJECT DESCRIPTION

SPPC is proposing to construct a new 345 kV electric transmission line to provide a new connection between its Falcon and Gonder substations. Depending on the route selected, the transmission line would be approximately 165 to 185 miles long and supported by approximately 725 to 820 tower structures, varying in height between 75 to 130 feet above ground depending on the terrain. Expansion and installation of additional facilities at the existing Falcon and Gonder substations would also be needed to upgrade the stations' capacity.

The project would require acquisition of a right-of-way grant from the BLM for the portion of the transmission line that would cross public lands. SPPC would pay rental fees for use of the right-of-way on public land. Right-of-way easements would also be acquired on some privately owned lands. The properties would remain under ownership of the title holder, and private property owners would be compensated for the use of the easement. SPCC would own, operate and maintain the transmission line and pay property taxes based on the value of the line improvements.

Project construction is scheduled to begin in May 2002 with completion by June 2003. The project includes a Reclamation Plan (see Appendix E) to revegetate and reclaim areas disturbed by construction activities.

PROJECT NEED

SPPC serves over 250,000 retail customers in northern Nevada and northeastern California with a service territory covering over 50,000 square miles. SPPC also provides transmission services to the Bonneville Power Administration (which delivers power to the Wells Rural Electric Company and Harney Electric Cooperative), Mt. Wheeler Power (delivering power to Ely and Eureka, Nevada), and the Truckee Donner Public Utility District. Energy load demand forecasts contained in SPPC's 1998-2017 Electric Resource Plan show that the utility's current infrastructure system will not be able to reliably meet future peak period demands as early as the year 2003.

On April 8, 1999, the State of Nevada Public Utilities Commission (PUC) selected the Falcon to Gonder project as the best option to address the projected system capacity limitations and enable SPPC to continue serving northern Nevada's energy needs. The Falcon to Gonder project would improve SPPC's electric import capability by 260 megawatts and enable Sierra to provide electric transmission service between Nevada, Idaho, Utah and the Northwest. If the Falcon to Gonder project is not approved, SPPC would need to immediately notify the PUC and begin emergency planning to address the projected year 2003 capacity shortfall.

PROJECT ALTERNATIVES

Five route alternatives are being considered in this EIS as possible ways to route the transmission line between the Falcon and Gonder substations. As shown in Figure ES-1, these include:

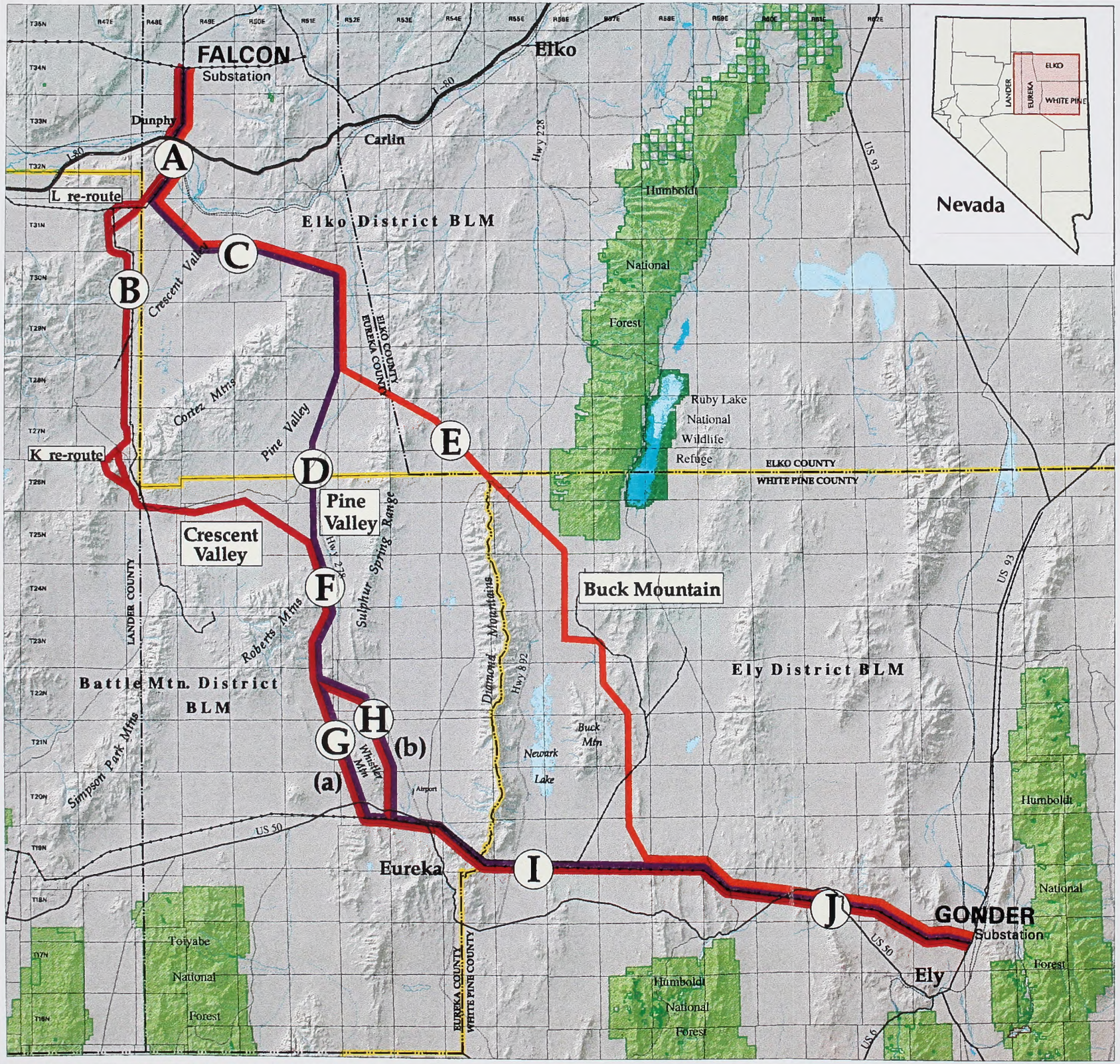
- Crescent Valley (a) route alternative
- Crescent Valley (b) route alternative
- Pine Valley (a) route alternative
- Pine Valley (b) route alternative
- Buck Mountain route alternative

The BLM has selected the Pine Valley (a) route as the preferred alternative, based on the analysis contained in this document.

This EIS also considers the No Action Alternative, which would mean that the transmission line would not be constructed between the Falcon and Gonder substations, nor would the substation upgrades be made. Under the No Action Alternative, SPPC would immediately begin emergency planning measures with the PUC to compensate for the anticipated shortfall in its system capacity.

ALTERNATIVES CONSIDERED BUT ELIMINATED FROM DETAILED ANALYSIS

A number of other project alternatives were considered and eliminated from further analysis in the EIS by the BLM during meetings with resource specialists held early on to discuss the project and potential alternatives to meet its objectives while minimizing environmental impacts. These alternatives and the reasons for their elimination from further analysis are summarized in Chapter 2.



Sierra Pacific Power Co.

FALCON to GONDER Project

Route Alternatives

Route	Segmentation
Crescent Valley	
(a)	A–B–F–G–I–J
(b)	A–B–F–H–I–J
Pine Valley	
(a)	A–C–D–F–G–I–J
(b)	A–C–D–F–H–I–J
Buck Mountain	A–C–E–J

BLM District Boundary

Existing Transmission Lines (60kv or larger)

Scale 1 : 760,320
(33% reduction of original)

Kilometers 5 0 5 10 15 20 25 30
Miles 5 0 5 10 15 20

1" = 12 miles

N

GIS Mapping by **EDAW, Inc.** — San Francisco

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SOURCES: EDAW, Inc. 1999 / Stantec Consulting, Inc. 1998 / Nevada —Bureau of Mines & Geology GIS / USGS —DEM

Figure ES - 1

ENVIRONMENTAL EFFECTS AND MITIGATION MEASURES

Chapters 3 and 4 examine potential environmental impacts associated with the five route alternatives, as well as the No Action Alternative. The BLM selected the following resource topics as being specifically relevant for this EIS, based on their knowledge of the area and comments received during the public scoping process:

1. Geology and Minerals
2. Soils
3. Water Resources
4. Vegetation (including Wetlands)
5. Invasive, Nonnative Species
6. Wildlife and Wildlife Habitat
7. Special-Status Species – Animals and Plants
8. Range Resources (Livestock Grazing and Wild Horses)
9. Visual Resources
10. Public Health and Safety
    (Fire Management, Hazardous Materials and Electric and Magnetic Fields)
11. Noise
12. Air Quality
13. Land Use and Access
14. Recreation and Wilderness
15. Social and Economic Values
16. Cultural Resources
17. Paleontology
18. Environmental Justice
19. Native American Concerns

BLM CRITICAL ELEMENTS

This EIS also discusses the following "Critical Elements," which are mandated for consideration by BLM policy and various government regulations:

• Air Quality	*(see Section 3.12)*
• Areas of Critical Environmental Concern	*(There are no designated Areas of Critical Environmental Concern in the project area)*
• Cultural Resources	*(see Section 3.16)*
• Environmental Justice	*(see Section 3.18)*
• Farmlands, prime or unique	*(There are no prime or unique farmlands in the project area)*
• Floodplains	*(see Section 3.3)*
• Invasive, nonnative species	*(see Section 3.5)*
• Migratory Birds	*(see Section 3.6)*
• Native American Religious Concerns	*(see Sections 3.16, 3.19)*
• Special-Status Species	*(see Section 3.7)*
• Wastes, Hazardous/Solid	*(see Section 3.10)*
• Water Quality (Surface and Ground)	*(see Sections 3.2, 3.3)*
• Wetlands / Riparian Zones	*(see Sections 3.3, 3.4)*

- Wild and Scenic Rivers — *(There are no designated Wild and Scenic Rivers in the project area)*
- Wilderness — *(see Section 3.14)*

IMPACTS COMMON TO ALL ROUTE ALTERNATIVES

The following environmental impacts would occur no matter which route alternative is used to build the project.

Geology and Minerals

Portions of the transmission line would traverse areas with steep terrain, seismic hazards, landslide potential and soft, expansive and corrosive soils, which could damage the tower footings. Engineering techniques that can be used to address these constraints include: soil testing, site investigations to avoid tower placement in active fault zones, selective use of helicopters in steep terrain, and reinforcing tower foundations.

Soils

Portions of the transmission line would traverse areas with highly erodible soils and steep slopes that could cause significant erosion impacts and special challenges related to reclamation success. These impacts and obstacles can be mitigated to less-than-significant by minimizing grading and vegetation removal in problem areas, using erosion control best management practices, and using weight-dispersing construction equipment and techniques in wet areas or in highly erodible soils when feasible.

Water Resources

The project has the potential to cause construction-related discharges of sediment and contaminants into water and alter water flows in channels, shallow springs, and wells. Similarly, all five alternatives would cross blue line streams (as shown on U.S.G.S. topographical quadrangle maps), flood plains, and flash flood hazard areas. However, impacts to water resources can be mitigated by preparation and compliance with appropriate prevention plans, strategic tower placement, use of Best Management Practices, and other measures.

Vegetation

Losses of upland and disturbed plant communities would be adverse but not significant for any of the five route alternatives. Similarly, temporary disturbance to wetlands, other waters of the U.S. (e.g., Humboldt River) and riparian communities would be adverse but not significant. Mitigation measures that would minimize impacts include: restricting construction vehicles and equipment to designated areas, using best management practices, installing fencing around wetland and riparian areas to create a buffer zone, and restoring wetlands and riparian areas to ensure no net loss.

Invasive, Nonnative Species

Portions of the transmission line would traverse areas containing noxious weed infestations (primarily hoary cress). The introduction or spread of noxious weeds and cheatgrass by project activities would be a potentially significant impact. This impact can be mitigated to less-than-significant by restricting construction vehicles and equipment to designated areas, using best management practices, educating construction, operations and maintenance personnel, creating fenced buffer zones around infestations, treating infestations, cleaning equipment, using certified weed-free materials, and restoring plant communities.

Wildlife

The main impacts to wildlife would result from habitat disturbance and loss, habitat fragmentation and increased human access. The regional context is such that the habitat loss would be adverse but not significant. Some individual wildlife may be impacted due to the construction of the project but these impacts would not affect populations as a whole. Certain precautions (such as pre-construction surveys) would diminish direct impacts to some species. Timing of project construction would also mitigate potential impacts to species such as mule deer. The physical presence of the transmission line could cause some avian species to collide with the lines; thus mitigation measures such as flight diverters would be required in critical areas.

Special-Status Species

Impacts to special-status species from project construction and operation would be similar to those for wildlife; mitigation measures would also be similar. The most significant impacts on a special-status species would be those related to sage grouse. These could include habitat disturbance, habitat fragmentation, and increased predation from birds of prey perching on transmission line towers. Mitigation measures, such as widespread use of perch deterrents and off site mitigation is recommended for sage grouse. These measures would help with the understanding of the birds' biology and interrelationship of habitat.

Other sensitive species, such as the rock-dwelling plant Pennell draba, occur within the project area. Potential impacts to this and other special-status species such as burrowing owl, and pygmy rabbit would be mitigated by pre-construction surveys and sensitive habitat exclusion zones, thereby negating any direct impacts. Potential impacts to nesting ferruginous hawks could occur from implementation of the project. This significant impact could be mitigated by avoiding construction activities during nesting periods. Other direct impacts could be mitigated through construction design and reclamation.

Range Resources

No significant impacts to livestock grazing or wild horses would occur. SPPC would coordinate with BLM and grazing permittees to avoid or minimize disruptions to grazing activities during construction and to ensure that water sources remain accessible.

Visual Resources

All of the route alternatives would cross a designated "low visibility" corridor along Interstate 80 and would be visible to eastbound and westbound traffic. Portions of the alternatives would cross over the Pony Express and Eureka-Palisade Railroad grade and potentially impact the visual setting of these sites. Vegetation removal and grading impacts associated with construction activity is common to all route alternatives. Minimizing grading, vegetation removal and revegetatating the disturbed area after construction should reduce this impact. Potential visual impacts may occur to occupied residences near the transmission line. Mitigation measures to help reduce visual impacts will be used.

Public Health and Safety (Fire Management, Hazardous Materials and EMF)

The potential of fire from transmission line construction and operation would be minimized through tree clearing in the right-of-way, engineering design, constructing the line based on minimum ground clearance and other standards set by the National Electrical Safety Code, and implementing a Fire Prevention and Suppression Plan (all of which are part of the proposed project). SPPC would also implement a Hazardous Materials Management Plan, including spill prevention and control measures and blasting safety measures, to minimize hazards. Research into studies of electric and magnetic fields (EMF) found a general consensus among medical and scientific communities that there is insufficient evidence to conclude that EMF cause adverse health effects.

Noise

Short-term construction noise would be significant for residents and facilities within 500 feet of construction activities. However, this impact could be mitigated by requiring mufflers on vehicles and limiting noisy construction activities (such as blasting) near residences and other buildings between Monday through Saturday, 7 a.m. to 7 p.m. During project operation, people living or working near the right-of-way edge could experience noise from the transmission lines (i.e., humming or crackling noises during wet or humid conditions).

Transmission line noise could significantly impact approximately 10 existing residential units along Segment B near Crescent Valley (if one of those routes is used) and/or approximately 11 residential units in a subdivision along Segment J (which is common to all five route alternatives). However, these impacts could be mitigated to less-than-significant levels.

In wet weather it is possible that AM radio reception for weak signals could be adversely affected by corona-induced noise on the right-of-way. Segment B has one existing residential unit (a trailer) within the right-of-way, and Segment J has 3 residences close to the right-of-way edge that could be affected. Although this is not a significant impact, mitigation measures are proposed.

Air Quality

No significant impacts to air quality were identified.

Land Use and Access

The existence of the transmission line would restrict land uses in, and potentially along, the right-of-way. Mitigation measures are identified that can reduce this impact. No significant impacts related to roads or access were identified.

Recreation / Wilderness

No significant impacts to recreation or wilderness resources were identified.

Social and Economic Values

No significant adverse impacts to social or economic values were identified. On the contrary, the project would generate between $35,200,000 and $37,680,000 in state property tax revenues for government agencies in the first 40 years of the project. Project-related spending would also increase sales tax revenue for local governmental agencies. In addition, SPPC would pay right-of-way rental fees to the BLM for use of public lands. Private property owners would receive compensation for right-of-way easements on their lands.

Cultural Resources

Numerous prehistoric and historic sites recommended eligible for the National Register of Historic Places (NRHP) exist throughout the project area. Direct impacts to prehistoric and historic sites, including surface or subsurface disturbance incurred during project construction, operation, or maintenance, could occur anywhere along the proposed route alternatives. Measures to mitigate these impacts could include: 1) avoidance 2) monitoring, and 3) data recovery. A detailed mitigation program would be provided in an Historic Property Treatment Plan.

The potential to discover unanticipated cultural sites, including human remains, during construction activities occurs everywhere along the proposed route alternatives. Construction activities could damage or destroy these previously unknown sites. To mitigate these potential effects, SPPC would immediately halt all ground-disturbing activities within 50 meters of the discovery and secure the area to prevent vandalism or other damage. The BLM authorized officer would be notified immediately of the discovery.

Authorization to proceed would be issued in writing by the BLM only after the discovery had been evaluated and any necessary mitigative measures completed.

The proposed project could also increase traffic and accessibility in areas that were previously inaccessible or more remote, which could potentially increase unauthorized collection and vandalism of significant archaeological sites. Worker training and education, restriction of access to sensitive sites, and exclusionary flagging or fencing would be implemented to mitigate these potential impacts.

A number of unevaluated cultural resource sites exist both within, and outside of, the selected route alignment. These unevaluated sites may be eligible for the NRHP. Sites left unevaluated after selection of the preferred route and agency review of site significance recommendations may be further examined by the BLM, by way of field visits and/or archaeological testing. The project would also have visual impacts to some cultural sites. Various mitigation measures for potential impacts to cultural resources are proposed and would be detailed in the Historic Property Treatment Plan.

Paleontological Resources

All project route alternatives (portions of Segments B, C, D, and E, specifically) would cross the Hay Ranch Formation, which has a high potential for the existence of significant paleontological resources such as fossil mammals, plants, and invertebrates. To mitigate these potential impacts, a paleontologist meeting BLM qualifications would monitor construction activities in the Hay Ranch Formation and document significant findings. Similar measures as those stated above would be used for unplanned discoveries of paleontological resources encountered during project construction.

Environmental Justice

No environmental justice impacts (i.e., no disproportionate impacts to low-income or minority communities) were identified.

Native American Concerns

Medicinal plants are important in maintaining the Western Shoshone cultural traditions, and may occur anywhere in the project area. The plant locations are confidential to Native Americans, and have not been mapped. Project construction, operation, and maintenance may disturb or destroy these plants. Western Shoshone traditionalists knowledgeable about the location of traditional medicinal plants in the project area would be interviewed after selection of the preferred alternative. Information obtained from these interviews would be used to avoid areas that may contain medicinal plants. Medicinal plant areas that may be located within or near project components shall be field-checked by a botanist qualified to recognize such plants, and such information shall remain confidential.

COMPARISON OF ALTERNATIVES

The following summarizes the distinguishing characteristics and impacts associated with the five route alternatives.

Crescent Valley (a) and (b) Route Alternatives

The Crescent Valley (a) and (b) route alternatives have the potential to conflict with the Cortez mine expansion. The Crescent Valley (a) and (b) alternatives contain the most existing developments within 1,000 feet of the proposed project (i.e., 30 and 34 buildings respectively), when compared to the other routes. With both Crescent Valley route alternatives, transmission line noise could significantly impact approximately 10 existing residential units along Segment B near Crescent Valley (if one of those routes was used) and/or approximately 11 residential units in a subdivision along Segment J (which is common to all five route alternatives). However, these impacts could be mitigated to less-than-significant levels.

The Crescent Valley alternatives would have the greatest overall impacts to sensitive wildlife species. In addition to crossing 10 to 12 miles of mule deer winter range, respectively, the Crescent Valley routes cross the most miles of ferruginous hawk territory and near several sensitive sage grouse leks that could not be fully mitigated. The Crescent Valley alternatives would have the fewest impacts related to noxious weeds and cheatgrass, largely because of the existence of parallel transmission lines and previous disturbance. However, invasive weed impacts could be mitigated to a less-than-significant level.

The Crescent Valley (a) and (b) route alternatives could affect the highest number of significant cultural sites. These routes would come within two miles of several areas of concern to Western Shoshone tribes, as well as within two miles of six historic ranches. They also could impact the Shoshone Wells Historic Townsite, a significant ethnohistoric property, and would be within the viewshed of three significant Traditional Cultural Properties (TCPs) and ethnohistoric sites. These route alternatives contain large numbers of significant or unevaluated historic and prehistoric sites within the 500-foot wide study corridor, indicating the potential for disturbance during construction of the transmission line. Both Crescent Valley alternatives would cross the historic Pony Express Trail, which would be a significant impact and mitigation measures are recommended that would reduce it to a less-than-significant impact. Both Crescent Valley alternatives would be constructed near properties that could contribute to the proposed Roberts Mountain ethnohistoric district.

The Crescent Valley (a) and (b) alternatives have the highest number of significant visual impacts to key observation points (KOPs) by comparison with the Pine Valley and Buck Mountain alternatives. Both Crescent Valley routes would transect a significant cultural site. Due to the importance of the surrounding landscape to the site, these routes would have a high impact on the visual setting and result in a significant impact to this site.

Crescent Valley (b) would create a significant impact at the Pony Express Trail crossing. Both Crescent Valley alternatives would have a significant visual impact on the Eureka-Palisade Railroad grade (KOP 24). Crescent Valley (a) and (b) alternatives have the most miles of existing transmission lines (i.e., parallel alignment opportunities) – a positive element for minimizing visual impacts.

Pine Valley (a) and (b) Route Alternatives

The Pine Valley (a) route alternative would traverse the fewest number of privately owned parcels (Stantec 2000). The Pine Valley (a) route has approximately 18 existing buildings within 1,000 feet of the proposed centerline and 213 buildings within 1.5 miles, while the Pine Valley (b) route has about 22 buildings within 1,000 feet and 288 buildings within 1.5 miles. As with all of the route alternatives, transmission line noise could significantly impact approximately 10 existing residential units in a subdivision along Segment J. However, these impacts could be mitigated to less-than-significant levels.

The Pine Valley (a) alternative would cause the fewest impacts to sensitive wildlife species overall. The Pine Valley (a) and (b) route alternatives contain the fewest numbers of significant or unevaluated prehistoric sites. Both route alternatives would cross the historic Pony Express Trail, creating a significant visual impact; mitigation is recommended. Both route alternatives would be constructed near properties that could contribute to the proposed Roberts Mountain ethnohistoric district. The Pine Valley alternatives would also have a visual impact on the historic Eureka-Palisade Railroad grade, as the impact would affect the landscape context and visual setting of this historic site. Both of these routes would also be visible from the Colonel Conner Massacre Site, a potential ethnohistoric property. Both route alternatives would avoid any TCPs that are recommended as eligible for the NRHP, but could impact two currently unevaluated TCPs. Overall, the Pine Valley (a) route alternative would have the fewest impacts to cultural resources.

Overall, the Pine Valley (a) and (b) alternatives have the least amount of significant visual impacts.

Buck Mountain Route Alternative

The Buck Mountain route is the shortest of all the alternatives but crosses the greatest number of privately held parcels (i.e., 73). The Buck Mountain route has approximately 13 existing buildings within 1,000 feet of the proposed centerline and 173 buildings within 1.5 miles. As with all of the route alternatives, transmission line noise could significantly impact approximately 10 existing residential units in a subdivision along Segment J. However, these impacts could be mitigated to less-than-significant levels.

Although Buck Mountain is the shortest route, it would be extremely close to several sensitive sage grouse leks and impact the greatest number of ferruginous hawk nests. The Buck Mountain route also contains the most undisturbed and unfragmented habitat of all the alternatives.

The Buck Mountain route contains numerous significant or unevaluated prehistoric and historic sites within the 500-foot wide study corridor. Many of these sites also retain a high amount of integrity given their relatively remote location. Like the Pine Valley routes, the Buck Mountain alternative would involve impacts to the historic Eureka-Palisade Railroad grade and the Colonel Conner Massacre Site, a potential ethnohistoric property. This route also would transect the portion of the Beowawe-McGill aboriginal trail identified in Railroad Pass and may affect 12 recorded cultural properties that may contribute to the proposed Railroad Pass ethnohistoric district. It would also transect cultural properties that could contribute to an ethnohistoric district associated with antelope hunting, would cross the Pony Express Trail and would be within the viewshed of the Emigrant Trail.

The Buck Mountain alternative ranks in the middle between the Crescent Valley and Pine Valley routes in terms of significant visual impacts. Significant impacts could occur at three locations along the Buck Mountain route alternative. The Visual Resource Management analysis (VRM) resulted in strong structural contrast ratings for all KOPs along Segment E of the Buck Mountain route and moderate visual impacts for four KOPs and significant impacts for two KOPs. The Buck Mountain alternative has the fewest miles of existing transmission lines (i.e., parallel alignment opportunities).

TABLE ES-1: SUMMARY OF RANKINGS — ROUTE ALTERNATIVES COMPARISON

	Crescent Valley (a)	Crescent Valley (b)	Pine Valley (a)	Pine Valley (b)	Buck Mountain
Wildlife	4	5	1	3	2
Invasive Weeds	1	2	3	4	5
Cultural Resources	4	5	1	2	3
Visual Resouces	2	4	1	2	3

Preferred Alternative

No Action Alternative

The National Environmental Policy Act (NEPA) requires that an EIS include analysis of the "No Action Alternative," against which the effects of the "action" alternatives can be evaluated and compared. The no action alternative in this EIS would mean that no new transmission facilities would be constructed between the Falcon and Gonder substations. Under the No Action Alternative, SPPC would attempt to meet its rapidly growing customer needs with existing facilities, along with other measures to compensate for the anticipated shortfall in the supply of electrical power in the region. The No Action Alternative

also would mean that the associated BLM Resource Management Plan amendments would not be required.

Under the No Action Alternative, the projected shortage of electric power in SPPC's control area will continue to grow as customers demand greater amounts of electricity. This shortage is forecast to occur during peak load conditions in the summer of 2003, and may result in the curtailment of some customers. Under this alternative, there will also be a continued shortage of recommended energy reserves during peak load conditions. This existing shortage could result in SPPC's inability to provide service to some customers during unscheduled outages of major transmission or generation facilities. Under the No Action Alternative, adverse environmental, socioeconomic, and electric service impacts could result from compensating actions taken by SPPC to ensure an adequate, affordable, and reliable energy supply to northern Nevada.

If the No Action Alternative is selected following the EIS and right-of-way application review process, SPPC would immediately notify the State of Nevada Public Utilities Commission that it cannot comply with the commission's Electric Resource Planning Opinion and Order issued April 8, 1999. This order found that the Falcon to Gonder 345 kV transmission project is in the public interest. Following notification, SPPC and the commission would most likely initiate an emergency planning process to determine the best way to meet forecast customer energy requirements.

BLM PREFERRED ALTERNATIVE

As the lead agency, the BLM is responsible for selecting a preferred alternative. The BLM's *National Environmental Policy Act Handbook* directs that "the selection of the preferred alternative should be based on the environmental analysis as well as consideration of other factors which influence the decision or are required under another statutory authority" (BLM 1998:V-8). The BLM has selected the Pine Valley (a) transmission line route as the preferred alternative.

This selection is based on the analysis in this EIS, as well as other considerations related to the agency's mission and responsibilities to manage federal public lands for multiple beneficial uses while balancing that objective with the need to protect environmental and cultural resources. This alternative would achieve the project objective of upgrading SPPC's electric transmission system capacity to address projected shortfalls in the year 2003. It also would have the fewest impacts to sensitive wildlife, cultural and visual resources than any of the route alternatives considered.

In this instance, the BLM selected the "environmentally preferred" transmission line route alternative as the agency's preferred alternative. The methodology used to identify the environmentally preferred route is explained in Section 3.20 and Appendix C of the DEIS. While the No Action Alternative would avoid environmental impacts associated with the Pine Valley (a) transmission line route alternative, it would not achieve the project objectives. Furthermore, a full array of mitigation measures has been developed to reduce and/or avoid environmental impacts before, during and after construction of the project.

SIGNIFICANT AND UNAVOIDABLE ENVIRONMENTAL IMPACTS

While the majority of environmental impacts would be fully mitigated by SPPC through avoidance of sensitive areas, reclamation, best management practices and other techniques, impacts to the following resources could remain significant and unavoidable with the Pine Valley (a) transmission line route (i.e., the preferred alternative):

- Visual impacts to the historic Eureka-Palisade Railroad grade along Segments C and D (as shown in Figure 3.9-11, KOP 10.

The transmission line would be visible from the historic Eureka-Palisade Railroad grade, either by paralleling it for a number of miles or by traversing it. Under either scenario, the transmission line would create an adverse visual impact to the historic setting of this NRHP-eligible resource. As mitigation, the 62-mile stretch of the Eureka-Palisade Railroad grade would be thoroughly recorded using complete photographic recordation in the location of Segments C and D. Interpretive signs at two locations would be placed where the grade is visible from State Highway 278. Archival research and preparation of a final report would also be completed for a thorough recordation of the railroad. These measures would help reduce but not entirely mitigate the impact. Thus, this impact would be considered significant and unavoidable.

EFFECTS ON PRIVATE PROPERTY OWNERS

While approximately 80 percent of the transmission line would cross public lands, right-of-way easements would be required on some private properties. One of the most frequent questions received at the scoping meetings (held at the beginning of the project to solicit input on community concerns and topics to be covered in the EIS) was *"How would this affect my property rights?"* SPPC would retain a qualified, independent real estate appraiser to estimate the market value of a permanent easement for the transmission line across private land.

The appraiser would also evaluate loss to personal property, if any, such as restrictions on growing crops or other uses, and potential loss in property value. After this analysis, a written offer would be presented to the property owner. SPPC would negotiate with the property owner to reach a mutually agreeable and fair settlement.

Upon completion of negotiations with the property owner, SPCC would record the easement document in the public records of the county in which the property is located. Being a public record, the permanent easement would be noted by title companies and would transfer with the property each time it is sold. Some owners believe that a transmission line may diminish the overall value of their property. That would depend on the location, size, current and potential uses of the property, and other factors. These factors would be evaluated in the independent real estate appraisal and would be included in the total compensation package, if applicable.

BLM RESOURCE MANAGEMENT PLAN AMENDMENTS

Approval of the Pine Valley (a) route alternative would also involve amendments to two BLM Resource Management Plans as part of the same federal action. As some portions of the route would be outside of BLM designated utility corridors (see Figure ES-2), the following amendments to the Shosone-Eureka and Elko Resource Management Plans would be adopted as part of the Proposed Action to further BLM's policy objectives of: 1) ensuring a system for transmission of utilities through a resource area, and 2) minimizing adverse environmental impacts by concentrating compatible rights-of-way in designated corridors that avoid sensitive resources.

- **Amendment of the Shoshone-Eureka Resource Management Plan** to designate a new utility corridor up to three miles wide (except where constraints exist) along the Falcon to Gonder project Pine Valley (a) route alternative and to delete the existing utility planning corridor along Highway 305.
- **Amendment of the Elko Resource Management Plan** to designate a new utility corridor up to three miles wide (except where constraints exist) along the Falcon to Gonder project

Pine Valley (a) route alternative and to modify a previous decision and allow the transmission line to cross the existing "low visibility" corridor along Interstate-80.

Designation of this new utility corridor and elimination of a planning corridor is intended to minimize the proliferation of dispersed rights-of-way by indicating the BLM's preferred location. Designation does not mean that future rights-of-way are restricted to corridors, nor does it indicate a commitment by the BLM to approve all right-of-way applications within corridors. Corridors provide for a variety of uses, including power lines, pipelines, railroads and highways. Subsequent projects seeking to locate in the utility corridor would be required to undergo additional environmental review pursuant to the National Environmental Policy Act. Future utility projects in the corridor, if any, could be expected to create roughly the same types of impacts as the Falcon to Gonder project and could be subject to similar mitigation measures.

BLM established the following planning criteria to evaluate the Resource Management Plan amendments and finds that the proposed amendments are consistent with the criteria:

- Emphasize a balanced multiple-use approach to land management, protecting fragile and unique resources, yet not overly restricting the ability of other resources to provide economic goods and services.
- Ensure a system for transmission of utilities through the Resource Management Planning Areas that would allow for future expansion by multiple users.
- Minimize adverse impact to the environment by concentrating compatible rights-of-way in designated corridors that avoid sensitive resource values.
- Select the preferred alternative based on a combination that best meets demands for public lands while minimizing disruption of the human environment.

The BLM plans to amend the two Resource Management Plans that would be affected by the selected alignment.

PUBLIC REVIEW OF DRAFT EIS

This Draft EIS has been distributed to a variety of federal, state and local government agencies, elected officials, environmental organizations, local community groups, Native American tribes, and other interested parties for review and comment. The public comment period extends from May 25 to August 22, 2001. Written comments on the Draft EIS are encouraged and must be submitted by August 22, 2001, to the following address:

Mary Craggett, Project Manager
U.S. Bureau of Land Management – Battle Mountain Field Office
50 Bastian Road
Battle Mountain, NV 89820

BLM and the cooperating agencies will review these comments and prepare a Final EIS, which will also be made available for public review. Following the Final EIS and its associated public review period, the BLM will issue a Record of Decision on the proposed action.

Sierra Pacific Power Co.

FALCON to GONDER Project

Existing BLM Corridors *

BLM Corridor Types

- Designated Utility Corridor
- Planning Corridor
- Low Visibility Corridor (per Elko RMP)

* From Shoshone-Eureka, Elko, and Egan Resource Management Plans

- BLM District Boundary
- Route Alternatives
- Existing Transmission Line

Scale 1 : 950,400

Kilometers 5 0 5 10 15 20 25 30

Miles 5 0 5 10 15 20

1" = 15 miles

N

GIS Mapping by EDAW, Inc. – San Francisco 4/25/01

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Sources: BLM Land Tenure Adjustments and Corridors - Recommendations 1986 / EDAW, Inc. 2000 / Stantec 1999

Figure ES - 2

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